

WHAT IS CLAIMED IS:

1. A method of promoting wound healing in an animal, wherein said wound is susceptible to healing upon administration of autologous fibroblasts, which method
5 comprises:
- (a) obtaining autologous fibroblasts,
 - (b) culturing the fibroblasts in a culture medium such that the cultured fibroblasts are non-immunogenic when administered, and
 - (c) administering the autologous fibroblasts in the form of an injection to a
10 wound in said animal, wherein said autologous fibroblasts promote healing of the wound.
2. The method of claim 1, wherein said animal is a human.
3. The method of claim 2, wherein said autologous fibroblasts are derived
15 from a tissue which is the same type of tissue as a tissue of which the wound is comprised.
4. The method of claim 2, wherein said fibroblasts are cultured in the
20 animal's own serum.
5. The method of claim 2, wherein said fibroblasts are passaged in culture less than about ten times.
6. The method of claim 5, wherein said fibroblasts are passaged in culture
25 from about four to about six times.
7. The method of claim 2, wherein about 20 million autologous fibroblasts are administered per administration.

8. The method of claim 2, wherein said wound is a chronic non-healing wound.

9. The method of claim 2, wherein said wound is an epithelial wound.

10. The method of claim 9, wherein said wound is due to venous stasis.

11. The method of claim 2, wherein said wound is a muscosal wound.

12. The method of claim 11, wherein said wound is due to a gastric ulcer.

13. The method of claim 12, wherein said autologous fibroblasts are administered by endoscopic injection.

14. The method of claim 11, wherein said wound is due to a duodenal ulcer.

15. The method of claim 11, wherein said wound is an anal fissure.

16. A method of promoting fistula healing in an animal, wherein said fistula is susceptible to healing upon administration of autologous fibroblasts, which method comprises:

- (a) obtaining autologous fibroblasts, and
- (b) administering the autologous fibroblasts in the form of an injection into the fistula track in said animal, wherein said autologous fibroblasts promote healing of the wound.

17. The method of claim 15, wherein said animal is a human.

18. The method of claim 17, wherein said autologous fibroblasts are derived from a tissue which is the same type of tissue as a tissue in which the fistula exists.

19. The method of claim 17, wherein said fibroblasts are cultured in the animal's own serum.

20. The method of claim 17, wherein said fibroblasts are passaged in
5 culture less than about ten times.

21. The method of claim 20, wherein said fibroblasts are passaged in culture from about four to about six times.

10 22. The method of claim 17, wherein about 20 million autologous fibroblasts are administered per administration.

23. The method of claim 17, wherein said fistula is an iatrogenic fistula.

15 24. The method of claim 17, wherein said fistula is a spontaneous fistula.

25. The method of claim 24, wherein said fistula is due to infection.

26. The method of claim 24, wherein said fistula is due to inflammation.

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27. The method of claim 24, wherein said fistula is due to ischemia.

28. The method of claim 24, wherein said fistula is due to carcinoma.

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29. The method of claim 24, wherein said fistula is due to radiation.

30. The method of claim 17, wherein said fistula is an enterocutaneous fistula.

31. The method of claim 30, wherein said fistula is a gastric, duodenal, pancreatic, jejunal, ileal or colonic fistula.

32. The method of claim 17, wherein said fistula is a tracheo-esophageal
5 fistula.

33. The method of claim 17, wherein fistula is a tracheocutaneous fistula.

34. The method of claim 17, wherein said fistula is an esophagocutaneous
10 fistula.

35. The method of claim 17, wherein said fistula is a bronchopleural
fistula.

15 36. The method of claim 17, wherein said fistula is an anal fistula.

37. The method of claim 17, wherein said autologous fibroblasts are administered by injection of the external fistula tract opening and by internal endoscopic injection.

add A2